

*NANTWICH RURAL DISTRICT.*

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ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

**FOR THE YEAR 1904,**

BY

R. T. TURNER., M.D., Ch. B. (Vict.), Medical Officer of Health.

TO WHICH ARE APPENDED THE REPORTS OF

Mr. J. A. DAVENPORT, Surveyor, Inspector of Canal Boats,  
and of Dairies and Cowsheds,

AND OF

Mr. JOHN STOREY, Inspector of Nuisances.

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NANTWICH:—ALFRED E. HILL, THE SQUARE.



# NANTWICH RURAL DISTRICT.

Medical Officer of Health—R. T. TURNER.

Population at Census (1901) —23,196.

Estimated population at middle of 1904—23,304.

Area in acres—98,458.

Birth-rate per 1,000 living—27·9.

Death-rate per 1,000 living—12·6.

Death-rate from principal Zymotic Diseases—0·4.

Deaths under one year per 1,000 births—90.

AREA AND POPULATION.—The whole district has been divided for registration purposes into four sub-districts. These are as follows:—

- 1.—CREWE, having an area of 31,145 acres, and an estimated population of 11,092. It includes Batherton, Barthomley, Basford, Blakenhall, Bridgemere, Checkley-cum-Wrinehill, Chorlton, Crewe, Doddington, Haslington, Hatherton, Hough, Hunsterson, Lea, Rope, Stapeley, Walgherton, Warmingham, Weston, Willaston, and Wybunbury, and parts of Church Coppenhall, Shavington-cum-Gresty, and Wistaston.
- 2.—NANTWICH, with an area of 21,300 acres, and an estimated population of 3,468, includes Acton, Aston-juxta-Mondrum, Austerson, Baddington, Brindley, Burland, Cholmondeston, Coole Pilate, Edleston, Faddiley, Henhull, Hurleston, Leighton, Minshull Vernon, Poole, Stoke, Woolstanwood, and Worleston.
- 3.—Bunbury has an area of 20,979 acres, and an estimated population of 4,122. It comprises the townships of Alraham, Bickerton, Bulkeley, Bunbury, Calvey, Cholmondeley, Church Minshull, Egerton, Haughton, Peckforton, Ridley, Spurstow, Wardle, and Wettenhall.
- 4.—WRENBURY, which has an area of 25,034 acres, and an estimated population of 4,622. It includes Audlem, Baddiley, Broomhall, Buerton, Chorley, Dodcott-cum-Wilkesley, Hankelow, Newhall, Sound, Woodcott, and Wrenbury-cum-Frith.

The Census returns for the Rural District were as follows:—

		Males.		Females.		Totals.
Crewe	...	5,478	...	5,506	...	10,984
Nantwich	...	1,763	...	1,705	...	3,468
Bunbury	...	2,052	...	2,070	...	4,122
Wrenbury	...	2,278	...	2,344	...	4,622
		<hr/> 11,571		<hr/> 11,625		<hr/> 23,196

In calculating the death-rates of the whole District, and of the various sub-Districts, all deaths of non-residents of the District dying in the Workhouse Men's Hospital have been excluded, and all deaths of residents of the District occurring there have been referred to their respective sub-Districts, as also have all deaths of women belonging to the District who died in the Workhouse Women's Hospital, Nantwich.

The birth-rates for the four sub-districts were respectively 29·3, 24·2, 24·0, and 30·9. The death-rates for the same four sub-districts were respectively 12·9, 14·7, 11·1, and 11·4.

The birth-rate was 2·0 higher than in 1903. The death-rate was 1·0 higher than in 1903, but with that solitary exception was lower than in any of the preceding eight years.



**INFANT MORTALITY.**—Fifty-nine of the deaths registered as occurring in the Rural District were those of children under one year of age. The causes of death were as follows:—Measles, 1 case; Whooping Cough, 4 cases; Diarrhœa, 2 cases; Bronchitis, 2 cases; Broncho-pneumonia, 8 cases; Congenital Syphilis, 1 case; Premature Birth, 12 cases; Suffocation, 1 case; Inattention at Birth, 1 case; Convulsions, 6 cases; Debility, Marasmus, and Inanition, 19 cases; Rickets, 1 case; Intussusception, 1 case.

The deaths under one year for the previous eight years were respectively 78, 90, 64, 68, 56, 55, 56, and 53.

#### DEATHS FROM ZYMOTIC DISEASE:—

(a) **SCARLET FEVER, DIPHTHERIA, AND MEMBRANOUS CROUP.**—No deaths resulted during the year from any of these causes.

(b) **MEASLES.**—Two deaths resulted from this disease, that of a child at Shavington, aged 10 months, on December 7th, and that of a child at Blakenhall, aged 16 months, in November.

(c) **ENTERIC FEVER.**—One death resulted from this disease, that of a woman, aged 53 years, at Weston, in February.

(d) **DIARRHŒA.**—Two deaths were ascribed to this cause. In each case the sufferer was less than one year of age.

(e) **WHOOPING COUGH.**—Three deaths were ascribed to this cause during the year. They were as follows:—One at Wybunbury and one at Willaston, aged respectively five and fourteen months, in January; one at Shavington, aged four months, in March.

**INFLUENZA.**—This disease was returned as the cause of the death of two persons, aged respectively 47 and 69 years.

**PHTHISIS.**—The deaths of fourteen persons were ascribed to this disease during the year. This is equivalent to a death-rate of 0·6 per 1,000. The death-rates from this disease for the previous four years were respectively 0·75, 0·6, 0·38, and 0·3.

**LUNG DISEASES OTHER THAN PHTHISIS.**—This group of diseases caused the deaths of thirty-seven persons. This is equivalent to a death-rate of 1·5 per 1,000.

**HEART DISEASES.**—This group of diseases accounted for the deaths of thirty-nine persons. This is equivalent to a death-rate of 1·6 per 1,000.

**UNCERTIFIED DEATHS.**—In only one case was a death registered without the certificate of a qualified Medical Practitioner, or of the Coroner after inquest. The cause of death was registered as “probably convulsions.”

**DEATHS FROM INJURIES, AND CORONER'S INQUESTS.**—Inquests were held in thirty-three cases. The causes of death, as certified by the Coroner, were as follows:—Heart Disease, 2 cases; Anthrax, 1; Burns, 3; Drowning, 8; Bronchitis, 2; Run over by trains, 2; Cut Throat, 2; Suffocation, 2; Blood Poisoning, 2; Accidental, 1; Inattention at Birth, 2; Poisoning by Salts of Lemon, 1; Poisoning by Strychnine, 1; Thrown from Conveyance, 1; Shooting (suicidal), 2; Run over by Cart, 1 case.

**SICKNESS.**—During the year 110 cases of Infectious Disease were notified to the Medical Officer of Health. They were as follows:—

Smallpox ...	...	...	...	...	...	1 case
Diphtheria ...	...	...	...	...	...	5 cases
Erysipelas ...	...	...	...	...	...	18 „
Scarlet Fever ...	...	...	...	...	...	79 „
Enteric Fever ...	...	...	...	...	...	4 „
Puerperal Fever ...	...	...	...	...	...	3 „
Total...						110 cases.

The following table shows at a glance the state of the district as to infectious diseases and the deaths resulting therefrom during the past nine years.

NOTIFICATIONS AND DEATHS FROM NOTIFIABLE DISEASES, DURING THE  
YEARS 1896—1904.

YEAR.	CASES NOTIFIED.								DEATHS							
	Smallpox	Scarlet Fever	Diphtheria	Membranous Croup	Enteric Fever	Puerperal Fever	Erysipelas	Total Annual Notifications	Smallpox	Scarlet Fever	Diphtheria	Membranous Croup	Enteric Fever	Puerperal Fever	Erysipelas	TOTAL DEATHS
1896.....	...	109	9	8	4	2	...	132	...	6	6	8	1	2	...	23
1897.....	...	117	11	...	4	1	10	143	...	4	3	...	1	...	2	10
1898.....	...	94	16	4	14	...	14	142	...	4	1	1	5	...	1	12
1899.....	...	59	27	...	11	2	14	113	...	2	4	...	...	1	...	7
1900.....	...	164	9	3	9	1	15	201	...	5	2	1	2	...	...	10
1901.....	..	79	30	1	7	5	6	128	...	1	8	1	2	2	...	14
1902.....	2	20	73	...	4	2	9	110	...	...	13	...	1	...	...	14
1903.....	2	33	24	1	4	...	10	74	...	...	5	1	2	...	...	8
1904.....	1	79	5	...	4	3	18	110	..	...	...	...	1	1	2	4

(a) SMALLPOX.—One case of this disease occurred in the district during the year. This occurred on May 4th at Audlem. The patient was a young man, aged 26 years, who had been living in service in London, and, having got out of employment, had walked home. When he had been at home about seven days he began to feel ill. I found on enquiry that he had slept at various lodging-houses on his way home, and that on the eleventh and twelfth nights before his first symptoms of illness, he had slept in a lodging-house at Newcastle-under-Lyme. He, unfortunately, did not know the name of the house, or that of the street in which it was. I feel practically certain that he was infected in this house, as I believe there were several cases of the disease in the neighbourhood of Newcastle at that time. Immediately on receipt of a telegram from the medical man in attendance, asking me to see the case with him, I went to Audlem, examined the man, obtained a complete list of persons who had been in contact with him since his illness began, and arranged for his removal to the Smallpox Hospital. Within six hours nurses were obtained, the hospital made ready, and the patient comfortably established therein. Considering that the patient had about  $6\frac{1}{2}$  miles to travel to hospital, I consider that no time was lost in his removal. On the next day I arranged with the Public Vaccinator for the vaccination of all contacts, and requested Mr. Storey to start the disinfection of the rooms which the patient had occupied. This was done by him to my entire satisfaction. Various articles of clothing, bedding, and furniture of small value were burnt by my direction, and other articles were sent to Crewe for disinfection by steam. I am pleased to report that the man recovered, and that there was no spread of the disease. This case shows the necessity of having hospital accommodation always ready for cases of smallpox. It was absolutely impossible to attempt isolation of such a case in his own home, and but for the hospital provision, spread must almost of necessity have taken place.

(b) SCARLET FEVER.—Seventy-nine cases of this disease were notified during the year. As will be seen from the following table, cases occurred in twenty-three Townships of the Rural District. The cases at Bridgemere, Blakenhall, Checkley, and Hunsterson, all occurred in families having members attending Bridgemere School, and in each family the child first attacked was actually in attendance at School. I accordingly formed the opinion that infection at School was taking place, and requested the Managers to



close the School for a short period. This measure was successful in checking the outbreak at once. The cases at Doddington were probably infected during a visit to the sea-side. The cases at Cholmondeley and Egerton were confined to children attending Cholmondeley School, and were part of an outbreak affecting the Township of Bickley, which adjoins this Rural District. As I thought that school-infection was taking place I examined all children at the School one morning, and though I did not find any child to be suffering with undoubted signs of the disease, I found one or two children with slight desquamation or with nasal discharges. I thought it best to close the School for a few weeks. During this period the School was cleaned and disinfected. During the first week after reopening, cases again began to be notified both in this District and the adjoining one, so, feeling convinced that infected children were again in attendance, I again closed the School, which measure succeeded in stopping the outbreak. Most of the other cases of this disease were sporadic, and appeared to be infected from various sources, most of which were incapable of discovery. The cases at Church Coppenhall were probably infected during attendance at School in Crewe. One case at Shavington was probably infected during a ride in an omnibus, as a child from an infected family in Crewe sat by a patient during the ride from Crewe to Shavington. The other cases at Shavington seemed to have some relation to attendance at the Shavington Schools, but this relation was not definite enough to justify me in closing the Schools. I append a table showing the cases occurring in the various Townships, and the months of their occurrence.

### SCARLET FEVER NOTIFICATIONS, 1904.

TOWNSHIPS.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	TOTALS.
Alpraham .....	...	...	...	2	...	...	...	...	...	...	...	...	2
Audlem .....	...	1	...	...	...	...	...	...	...	...	...	...	1
Blakenhall .....	...	...	...	...	...	...	...	...	...	2	...	...	2
Buerton .....	...	...	...	...	...	...	...	1	...	...	...	4	5
Bunbury .....	...	...	...	...	...	...	...	...	1	...	...	...	1
Checkley-cum-Wrinhill.....	...	...	...	...	...	...	...	...	1	1	1	1	4
Cholmondeley.....	...	...	...	...	...	...	...	...	2	1	...	...	3
Church Coppenhall.....	...	1	...	...	1	3	4	1	...	...	...	...	10
Bridgemere .....	...	...	...	...	...	...	...	...	...	...	...	2	2
Dodcott-cum-Wilkesley.....	...	...	1	...	...	...	...	...	...	...	...	...	1
Doddington.....	...	...	...	...	...	...	2	...	...	...	...	...	2
Egerton .....	...	...	...	...	...	...	...	...	...	...	2	...	2
Haslington .....	...	...	...	...	...	...	2	...	...	4	2	...	8
Hunsterson .....	...	...	...	...	...	...	...	...	...	...	...	2	2
Shavington .....	...	...	...	...	...	...	...	...	2	8	...	2	12
Sound .....	...	...	...	...	1	...	...	...	...	...	...	...	1
Stapeley .....	1	...	...	2	1	...	...	...	...	...	...	...	4
Weston .....	...	...	...	...	...	...	...	...	1	...	...	...	1
Willaston .....	...	...	...	1	...	...	...	...	1	2	2	2	8
Wistaston .....	...	...	...	1	...	...	...	...	...	...	...	1	2
Wettenhall .....	...	...	...	...	...	...	3	...	...	...	...	...	3
Wybunbury .....	...	...	...	...	...	...	...	...	1	...	...	...	1
Worleston .....	...	...	...	...	...	...	...	...	1	...	...	...	1
Workhouse (Worleston)...	...	...	...	...	...	...	...	...	...	...	...	1	1
Monthly Totals .....	1	2	1	6	3	3	11	2	10	18	7	15	79

(c) DIPHTHERIA.—Five cases of this disease were notified during the year. One occurred at Haslington in a child, aged thirteen, on October 12th; one at Barthomley, aged twenty-six, on October 14th; one at Willaston, aged thirty-three, on November 20th; one at Warmingham, aged eight years, on December 7th; and one at Wistaston, aged fourteen years, on December 27th. In the cases at Warmingham and Barthomley, gross sanitary defects were found on the premises where the cases occurred. In the other cases it was not easy to assign a cause for the outbreak.

(d) ENTERIC FEVER.—Four cases of this disease were reported during the year. They were as follows:—One at the Workhouse Infirmary, Worleston, that of a man, aged forty; one at Weston on February 20th, that of a woman, aged fifty-seven years; one at Haslington on May 12th, a child, aged seven years; and one at Weston on August 6th, that of a woman, aged thirty-seven years. In the three last cases gross sanitary defects were found on the premises. The cases at Weston were in adjoining houses. I am glad to report that in these cases, as in the cases above-mentioned, where diphtheria occurred, the defects have been remedied.

(e) PUERPERAL FEVER.—Three cases of this disease were reported during the year, two close together at Shavington in the practice of a certain midwife, and one at Baddiley. I called upon the midwife in charge of the two cases at Shavington to cease attendance on midwifery cases for a month, and only resume her attendance on such cases after careful disinfection. This action appeared to stop an outbreak which at first threatened to be serious.

(f) ERYSIPELAS.—Eighteen cases of this disease were reported. They occurred at Hough, Weston, Bunbury, Willaston, Minshull Vernon, Shavington, Haslington, and Wistaston.

(g) MEASLES.—This disease was epidemic at Shavington in October and November, and for this reason the School was closed for a short period.

(h) WHOOPING COUGH.—This disease was prevalent at Church Minshull during the latter part of the year, and at about the same time was prevalent also at Ridley. It was undoubtedly spread at School.

SANITARY ADMINISTRATION.—The same methods of dealing with infectious outbreaks have been employed as in former years. The Inspector has done valuable work during the year in the improvement of the sanitary condition of various premises. His report, which is appended, gives details of his work.

SCHOOLS.—The Schools at Cholmondeley, Bridgemere, Shavington, and Church Minshull were closed for short periods during the year on account of infectious outbreaks. I cannot help but regret the abolition by the Education Department of the Epidemic Grant under Section 101 of the Code. As matters now stand, if a child is excluded on account of infectious disease in the family to which it belongs, no grant is received by the Managers, whereas formerly, if the child was excluded by the direction of the Medical Officer of Health, the same grant was paid as if the child had been present. The outcome of this is the tendency to continue a child's attendance at School as long as possible, as its exclusion means financial loss. It is easy to see that if several families are excluded, this financial loss may be very serious. In fact it pays the Managers much better to close the School and thus deprive a whole neighbourhood of all educational advantages, than to exclude any considerable number of children. I cannot but feel that the abolition of the grant tends on the one hand to the spread of disease, and on the other to the hindering of education.

ISOLATION.—A Smallpox Hospital is now provided by the Nantwich Joint Hospital Board, and has been of the greatest advantage during the year in preventing the spread of smallpox from the case which occurred at Audlem. The permanent infectious Hospital for the reception of Scarlet Fever, Diphtheria, and Enteric Fever is now approaching completion, and will probably be ready for occupation during the present year. Though I am by no means in favour of the hurrying of *all* cases of *Scarlet Fever* into hospital from Rural Townships, I am certain that in many cases of this disease where special difficulties exist it will be of the greatest service, whilst in cases of Diphtheria and Enteric Fever it will be of the highest utility. I am sure that the money expended on this hospital will be amply repaid in the benefits received from it. The sanatorium treatment of Phthisis has had the consideration of the Council during the year.

DISINFECTION.—In a few cases articles of clothing and bedding have been sent to Crewe for disinfection. In some other cases articles have been destroyed. In all other cases the best disinfection of clothing and bedding possible at home has had to suffice. The Inspector has supervised the disinfection of most of the rooms in which infectious disease has occurred.



**RIVERS POLLUTION.**—Practically no alteration has taken place in the condition of the streams of the district. The Checkley Brook has been much complained of. Its condition is undoubtedly at times very bad.

**DAIRIES AND COWSHEDS.**—Good work in the inspection of cowsheds and dairies has been done by Mr. Davenport during the year. I append his report, and would especially direct the Council's attention to his remarks on the necessity of the Council making it quite clear that they intend to enforce their Regulations.

**DRAINAGE.**—Under this heading I have nothing to add to my remarks of former years, except that a scheme has been prepared and submitted to the Local Government Board for the drainage of Broad Lane, Stapeley.

**WATER SUPPLY.**—A very valuable improvement has been made in the pressure on the water mains in Chorlton, Hough, Shavington, Wybunbury, Stapeley, and Willaston. Full information is given as to the progress of the Council's water-works in the Surveyor's report, which I append.

**SLAUGHTER-HOUSES.**—The new byelaws made by the Council have now been approved by the Local Government Board. The whole of the townships of the district are now subject to one uniform set of byelaws. The good effect of these byelaws is already apparent, and will be more so as time goes on.

**DISEASED MEAT.**—The prosecutions successfully undertaken in past years by the Council have had a salutary effect, though the trade in diseased meat is by no means defunct as yet. It is now quite a common thing for myself or the Inspector to be asked by various butchers to examine doubtful carcasses. I have made it widely known that we are always willing to visit and inspect such carcasses. No formal seizures were made during the year.

**ANTHRAX.**—Numerous cases of this disease have occurred among cattle in the district during the year. The visiting of these cases have entailed a considerable amount of work. One fatal case of infection of a human being occurred in a butcher, who had dressed a carcass and sent it to Manchester, where it was fortunately seized.

**SCAVENGING.**—Public scavenging of closets and ashpits is provided for as in past years in Willaston, Shavington, Audlem, Haslington, and part of Wistaston. I am pleased to report that in Church Coppenhall, also, such work is now undertaken by the Council.

**REGISTRATION OF MIDWIVES.**—As far as I am aware, the names of all the midwives practicing in this district have now been sent to the County Medical Officer of Health. That good will come of the supervision that these women will shortly receive I have no doubt. The difficulty that I see ahead in Rural Districts like this is:—where will trained women fit for registration by the Central Midwives' Board be found when the present women, registered by virtue of their having been in practice before the passing of the Act, have been removed either by death or retirement. This is certainly a question which will need careful consideration.

**FACTORIES AND WORKSHOPS.**—Systematic inspections of the workshops and work-places of the District have been made, and a table giving information required under this head is appended to this report.

The usual statistical tables are appended, as also are the reports of Mr. J. A. Davenport, Surveyor, Inspector of Canal Boats, and of Dairies and Cowsheds, and of Mr. John Storey, Inspector of Nuisances.

A great deal of good work has been done by the Council in past years in the improvement of their District; but much still calls for their attention.

R. T. TURNER,

*Nantwich, February 25th, 1905,*

Medical Officer of Health.



**TABLE I.—NANTWICH RURAL DISTRICT COUNCIL. FOR WHOLE DISTRICT.**

YEAR.	Population estimated to Middle of each Year.	Births.		Total Deaths registered in the district.				Total deaths in Public Institutions in the District.	Deaths of Non-residents registered in Public Institutions in the District.	Deaths of residents registered in Public Institutions beyond the District.	Nett Deaths at all ages belonging to the District.	
		Number	Rate.*	Under One Year.		At all Ages.					Number	Rate.*
				Number	Rate.*	Number	Rate.*					
1896	23382	639	27'3	77	123	...	...	...	...	...	336	14'3
1897	23483	653	27'8	90	137	...	...	...	...	...	379	15'9
1898	23580	613	25'9	64	104	...	...	...	...	...	344	14'1
1899	23777	609	25'6	68	112	...	...	...	...	...	355	14'2
1900	23777	597	25'1	56	94	...	...	...	...	...	369	15'5
1901	23200	608	26'2	54	88	...	...	...	...	...	295	12'7
1902	23230	611	26'3	56	91	356	15'3	35	27	9	338	14'1
1903	23268	604	25'9	53	87	291	12'5	30	26	5	270	11'6
Averages for years 1896-1903	23462	617	26'2	64	104	323	13'9	32	26	7	336	14'3
1904..	23304	651	27'9	59	90	304	13'0	25	21	11	294	12'6

\*Rates in Columns 4, 8, and 13 calculated per 1,000 of estimated population.

Area of District in acres (exclusive of area covered by water), 98,458.

Total population at all ages	...	...	23,196
Number of inhabited houses	...	...	4,964
Average number of persons per house	...	...	4'9

At Census of 1901

**TABLE II.—NANTWICH RURAL DISTRICT. SUB-DISTRICTS.**

NAMES OF LOCALITIES.	1. CREWE.				2. NANTWICH.				3. BUNBURY.				4. WRENBURY.			
YEAR	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 Year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 Year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 Year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 Year.
1896...	11141	315	146	41	3538	78	66	9	3105	76	51	7	5597	170	71	20
1897...	11248	315	171	55	3538	95	82	12	3105	93	45	8	5597	150	81	15
1898...	11340	311	161	35	3538	90	64	8	3105	80	53	5	5597	132	66	16
1899 ..	11547	308	163	40	3538	87	78	14	3105	99	49	6	5597	115	65	8
1900 ..	11547	313	173	22	3538	79	58	12	4059	90	61	9	4643	115	77	13
1901...	10984	312	130	25	3468	83	45	8	4122	94	53	12	4622	122	54	9
1902...	11028	303	171	28	3468	82	52	13	4122	101	50	8	4622	125	65	7
1903...	11056	320	120	30	3468	82	56	7	4122	81	39	6	4622	121	55	10
Averages of years 1896-1903	11236	312	154	34	3512	84	62	10	3608	89	50	7	5237	131	66	12
1904...	11092	325	144	37	3468	84	51	15	4122	99	46	5	4622	143	53	2

**TABLE III.—NANTWICH RURAL DISTRICT. CASES OF INFECTIOUS DISEASE NOTIFIED IN 1904.**

NOTIFIED DISEASE.	Cases notified in whole district.							Total Cases notified in each locality.				No. of Cases removed to Hospital from each locality			
	At all Ages	AT AGES—YEARS.						Crewe	Nantwich	Bunbury	Wrenbury	Crewe	Nantwich	Bunbury	Wrenbury
		Under 1	1 to 5	5 to 15	15 to 25	25 to 65	65 and upwards								
Smallpox...	1	...	...	...	...	1	...	...	...	...	1	...	...	...	1
Diphtheria	5	...	...	3	1	1	...	5	...	...	...	...	...	...	...
Erysipelas	18	...	...	1	...	14	3	17	...	1	...	...	...	...	...
Scarlet Fever	79	...	16	52	5	6	...	56	2	13	8	...	...	...	...
Enteric Fever	4	...	...	1	...	3	...	3	1	...	...	...	...	...	...
Puerperal Fever	3	...	...	...	...	3	...	2	1	...	...	...	...	...	...
TOTALS	110	...	16	57	6	28	3	83	4	14	9	...	...	...	1

*Isolation Hospital*—Smallpox Hospital, Ravensmoor.

**TABLE IV.—CAUSES OF, AND AGES AT, DEATH DURING THE YEAR 1904.**

CAUSE OF DEATH.	Deaths in or belonging to whole district, at subjoined ages.							Deaths in or belonging to localities (at all ages).				Total Deaths in Public Institutions in the District
	All Ages	Under 1 year	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards	Crewe	Nantwich	Bunbury	Wrenbury	
Measles	2	1	1	...	...	...	...	2	...	...	...	...
Whooping Cough	4	3	1	...	...	...	...	3	...	1	...	...
Enteric Fever	1	...	...	...	...	1	...	1	...	...	...	...
Epidemic Influenza	2	...	...	...	...	1	1	2	...	...	...	...
Diarrhœa	2	2	...	...	...	...	...	2	...	...	...	...
Enteritis	1	...	...	...	...	...	1	...	...	...	1	...
Puerperal Fever	1	...	...	...	...	1	...	...	...	...	1	...
Erysipelas	2	...	...	...	...	1	1	1	...	1	...	...
Other septic diseases	3	...	1	...	...	2	...	...	1	...	2	1
Phthisis (Pulmonary Tuberculosis)	14	...	...	3	3	7	1	5	2	5	2	6
Other tubercular diseases	8	...	2	...	1	4	1	1	...	5	2	...
Cancer, malignant disease	21	...	1	...	...	13	7	12	2	2	5	2
Bronchitis	18	2	1	1	3	1	10	6	2	5	5	1
Pneumonia	19	8	...	1	1	5	4	12	3	2	2	2
Alcoholism. Cirrhosis of Liver	3	...	...	...	...	3	...	1	1	1	...	1
Venereal diseases	2	1	...	1	...	...	...	1	1	...	...	...
Premature Birth	12	12	...	...	...	...	...	7	2	1	2	...
Diseases and accidents of parturition	4	...	...	...	1	3	...	2	...	1	1	...
Heart diseases	39	...	...	1	1	14	23	25	4	3	7	5
Accidents	19	2	3	4	...	9	1	6	8	4	1	...
Suicides	9	...	...	...	1	7	1	5	...	1	3	1
All other causes	108	28	10	3	1	17	49	50	25	14	19	6
ALL CAUSES	294	59	20	14	12	89	100	144	51	46	53	25

The Institutions taken into account for the purposes of these tables are—Smallpox Hospital, Ravensmoor, Burland; Men's Hospital, Worleston; Women's Hospital, Nantwich.

The Union Workhouse is partly within and partly without the District.



## NANTWICH RURAL DISTRICT.

## Factories, Workshops, Laundries, Workplaces, &amp; Homework.

## 1.—INSPECTION.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTOR OR INSPECTOR OF NUISANCES.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
Factories... .. (Including Factory Laundries.)	4	...	...
Workshops ... .. (Including Workshop Laundries.)	48	...	...
Workplaces ... ..	2	...	...
Homeworkers' Premises ... ..	2	...	...
TOTAL... ..	56	...	...

## 2.—DEFECTS FOUND.

PARTICULARS.	Number of Defects.			No. of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
<i>Nuisances under the Public Health Acts :—</i>				
Want of Ventilation .. ...	2	2	...	..
Sanitary Accommodation unsuitable or defective ... ..	1	...	...	...
TOTAL .. ...	3	2	...	...

## 3.—OTHER MATTERS.

CLASS.	Number of	
	Lists.	Outworkers.
HOMEWORK :—		
<i>Lists of Outworkers—</i>		
Lists received ... ..	2	21
Addresses of Outworkers received from other Authorities ... ..	1	3
Total number of Workshops on the Register at the end of 1904 ... ..	35	





## SURVEYOR'S REPORT, 1904.



**WATER SUPPLY.**—The laying of the auxiliary mains in Chorlton, Hough, Shavington, Wybunbury, and Stapeley, and extensions of mains in Alvaston, Haslington, Haughton, and Wistaston have added a considerable length to the mileage of water mains in the Nantwich Rural District during the year 1904. Eight thousand and seventy-three yards of mains have thus been added to the system, the whole having been laid by the Council.

The entire length of mains now laid in the Rural District since 1879 has been 274,931 yards, or nearly 156 $\frac{1}{4}$  miles. Mains laid by private owners prior to 1901 have not been included.

Eighty-two additional houses have been supplied with water from the Council's mains during the past year, making a total of 4,032 houses supplied by mains in the district since 1879.

The consumption of water throughout the whole district during 1904 has been 66,850,000 gallons, of which 1,110,000 gallons have been supplied to Bickley, for the Malpas Rural District Council, giving a consumption per house per day of 55.7 gallons for the whole district, and a consumption per head of population per day of 11.1.

Work in connection with the various water main extensions before referred to has been going on more or less during the greater portion of the year, and I think it may now be claimed that the pressures throughout this very large rural district supplied by water mains are quite satisfactory. It is very satisfactory, too, that Wybunbury, Stapeley, and other portions of the district have now no just cause of complaint on the ground of want of pressure.

With respect to projected waterworks, it is not for me to look too far ahead, or to speculate upon what I never may be an actor in. It does seem, however, that if there is any desire now to supply Audlem and surrounding districts according to proposals previously made by myself, and which I still adhere to, a scheme either in connection with the Nantwich Urban Council or by this Council alone, could be formulated, but I think it may be desirable to consider the supply of Chorley and the Combermere Estates and district from the Cholmondeley mains and the Vyrnwy Aqueduct.

Unguaranteed townships must be always dependent on a selling of the waters to the consumers by measure, to some extent like other commodities are sold, or the township rates will have to bear any burden that may arise from any excessive use of water.

My estimates of the cost of waterworks during a long course of years have in no case been exceeded except once at Cholmondeley, which was accounted for by a rise in the price of iron.

The whole question of charges for water wants putting on a satisfactory basis, and if it is wished to avoid charges on the rates it will be necessary to define more strictly, in connection with farms, what is intended by "Water used for domestic purposes," and "Water used for trade purposes." Dr. Fox, the late M.O.H., used to say, he did not care how much water the people used from the mains, the more the better; but if the people themselves are not financially happy about it, it behoves us to endeavour to reconcile a sufficiency of supply with a moderate cost.

The Stapeley water works are in good order, but owing to the inadequate rainfall in the latter part of 1904, the storage in the reservoir had at times to be supplemented from the upper mains.

The Barthomley well has been greatly improved, and a new pump was put in in the early part of last year.

The water supplies of three houses within the statutory limits of water mains have been submitted to the County Analyst and reported to be "bad." These houses have since been coupled up with the mains.

**SEWERAGE.**—With the exception of the coupling up of houses to existing sewers, there is only the proposed sewerage of Broad Lane, Stapeley, to report under this head. Levels and sections for this work

have been taken, and plans made, and I have submitted reports upon the scheme. The matter now stands with the Local Government Board.

**PUBLIC LIGHTING.**—The public lighting of the townships of Audlem, Crewe (township), Acton, and Willaston, has been duly carried out. Shavington-cum-Gresty at the close of the year shewed signs of a desire for more light. The Council formerly lighted a portion of the township, which was subsequently taken into the Borough of Crewe. Revised tables for lamp lighting have been furnished to Audlem,

**FACTORIES, ETC.**—There have been no applications for the certifying of new factories during the year.

**NEW BUILDINGS.**—Plans for seventy-nine new buildings in the district were passed by the Council in 1904, as follows .—

New Houses	...	...	...	...	...	...	53
New Outbuildings	...	...	...	...	...	...	15
Alterations and Additions, etc.	...	...	...	...	...	...	7
Schools and Public Buildings	...	...	...	...	...	...	3
Slaughter-houses	...	...	...	...	...	...	1
Total ...							79

which makes a total of 2,444 plans for new buildings sanctioned within the Rural District since these Urban Powers were first obtained in 1875, as follows :—

Audlem	...	...	...	...	...	...	140
Shavington	...	...	...	...	...	...	269
Bunbury	...	...	...	...	...	...	89
Willaston	...	...	...	...	...	...	261
Haslington	...	...	...	...	...	...	296
Church Coppenhall	...	...	...	...	...	...	694
Other Townships	...	...	...	...	...	...	695
Total ...							2444

The inspection of all new buildings is necessarily included.

**COWSHEDS AND DAIRIES.**—One hundred and ninety-eight inspections of cowsheds, etc., have been made during the past year, and reports in each case presented to the Council. Copies of these reports have been forwarded by the Clerk to the occupiers of the cowsheds, with a synopsis of the Regulations and explanatory remarks, and with the request of the Council that the cowsheds might be altered in accordance with the notice and papers sent, and made to comply with the regulations.

Practically, with one or two exceptions, the whole of the registered cowsheds in the district have now been reported upon.

There have been 33 new names added to the Register of Cowkeepers during 1904, and 177 names have been taken off the Register, either by deaths, removals, or special applications to the Council. At the end of 1904 there remained 377 names on the Register. No general re-inspections have taken place, but casual re-inspections have revealed many improvements carried out.

Plans of five new cowsheds in accordance with regulations have been passed by the Council during the preceding year, and other plans for alterations to existing cowsheds have been submitted to and generally approved by the Council. All this means getting the public and their bricklayers into better ways. With respect to a general re-inspection, I should advise that the Council should issue notices that such general



re-inspection is about to take place, and at the same time indicate the action the Council may take in those cases where either nothing has been done, or nothing of much value. It is necessary and desirable that every consideration should be given in the carrying out of Regulations that must cost "somebody" a considerable amount of money, but at the same time if the Regulations are to be carried out fairly, not only those who are willing and desirous to do their best should be reported upon, but the "hangers back" should also be dealt with, and especially those (and I know there are some) that are "waiting" to see if the Council are really in earnest in requiring a general compliance with their regulations.

CANAL BOATS.—A copy of the Annual Report to the Local Government Board is attached to this report.

GENERAL.—The numbering of the houses in Haslington village was carried out during the past year, and further street name plates were fixed. Nine hundred and seventy-one letters have been written during the year.

JOHN ALDERSEY DAVENPORT,

*February 10th, 1905.*

Engineer and Surveyor.

## Inspections under the Canal Boats Acts for the year 1904.



The "Canal Boats Acts" appear to continue working satisfactorily in this district.

Fifty-five boats have been fully inspected during the year, and all their details entered in the Journal. Forty-three boats entirely conformed to the laws and regulations. There were seventeen infringements on the remaining twelve boats.

An absence of Certificate in one case was satisfactorily explained by its having been sent in to the Registration Authority for the purpose of the re-registration of the boat. A girl just over the legal age was in another case occupying the same cabin as relatives of hers, a man and his wife, which appeared to be "an improper occupation."

Painting was required for eight boats and repairs for five. A proper water vessel was required for two boats, and on re-inspection of another boat, I found that a proper water vessel had been provided after notice.

I have no complaints under the heads of "Certificate not identifying owner with boat," "Marking," "Overcrowding," "Partitions separating sexes," "Cleanliness," "Ventilation," "Refusal of admittance to Inspector," "Bulkheads," "Removal of Bilge water," or "Infectious Disease"—I am not aware of any case of Infectious Disease having occurred on any of the boats plying in this district during the year.

We have taken no legal proceedings during 1904, and those taken successfully during the preceding year have had an excellent effect.

In all cases, complaints of breaches of Regulations have been brought to the notice of the owners of the boats, and satisfactory replies have been received. In several instances, on re-inspection, I have found promises carried out both as regards the past and previous years. It does not always happen that you can secure re-inspection during the same year that a boat is inspected. With the Shropshire Union Canal Company, the principal owners on these Canals, there is no trouble. Dilapidated certificates are found sometimes and rectified.

There were thirty-four women on the fifty-five boats inspected and thirty-eight children: twenty-one being children between the ages of five and twelve years, and seventeen being children of five years of age and under. On eight boats there were women and no children, and on twenty-three boats there were women and children; on twenty four boats there were men only on board.

Twenty-seven boats were the only homes of those occupying them, and twenty-eight captains had homes in addition to their boats.

Sunday and week day services in connection with the Church of England are held on the Canal at Barbridge, a very central junction for Canal Boat traffic.

Improvements are going on in connection with our canals, but more are possible—one in an educational sense is referred to in the Local Government Board's Inspector's Report to his Board, where the suggestion is thrown out that it should be made "an offence to keep a child of school age on a Canal Boat except during the holidays"—and some amelioration I suggest is wanted in connection with the forecabins of these narrow boats, for it will be hard to recognise the majority of these "registered" forecabins as proper and healthy abodes.

JOHN ALDERSEY DAVENPORT,

Inspector under the Canal Boats Acts.

January 14th, 1905.



# Report of INSPECTOR of NUISANCES for 1904.

I have the honour to submit my first Annual Statement of the work done by the Sanitary Inspector during the past year.

In addition to my ordinary inspections, I have made a thorough sanitary survey of 345 dwelling-houses situate in various parts of the district. Particulars of each house have been recorded in a book used for that purpose, and kept for any future reference; special attention being paid to the construction of walls, roofs, windows, floors, means of drainage, and out-offices. Where defects were discovered they were promptly brought before the notice of the respective owners, with a view to their rectification.

CESSPIT PRIVIES.—A number of complaints have been received from the populous parts of your district, of nuisances occasioned during the process of scavenging of privy cesspits. Such conveniences are decidedly objectionable in thickly populated areas, and are certain to create a nuisance when being emptied. Sixty-one of these insanitary privies have been converted into closets provided with a movable receptacle, which with due care can be scavenged without creating any nuisance.

DRAINAGE.—Properly constructed drains have been provided in connection with fifty dwelling-houses which either had no means of drainage, or where, on inspection, the drains were found to be defective. In my opinion there is no necessity for a drain at isolated cottages which have sufficient garden or land attached to them on which the household slops, etc., can be disposed of in a sanitary manner.

New draining systems have also been provided for the effectual drainage of the whole of the buildings belonging to six farmsteads situate in Alpraham, Buerton, Coole Lane, Hatherton, and Wrenbury-cum-Frith respectively.

PAVING OF YARDS.—Material improvements have been made in the paving of back yards belonging to forty-six houses, situate principally in Willaston.

WORKSHOPS.—There are thirty-five workshops in your district situate as follows, viz :—

3 in	...	...	...	Alpraham.	12 in	...	...	...	Audlem.
3 "	..	...	..	Aston.	1 "	...	...	...	Coole Pilate.
2 "	...	...	...	Church Coppenhall.	4 "	...	...	...	Haslington.
1 "	...	...	...	Newhall.	1 "	...	...	...	Wardle.
2 "	...	...	...	Willaston.	1 "	...	...	...	Wistaston.
2 "	...	...	...	Wrenbury-cum-Frith.	3 "	...	...	...	Wybunbury.

Informal Notices have been served on four occupiers of workshops, requiring three to limewash the walls of their premises, and one to provide adequate means of ventilation in accordance with the provisions of the Factory and Workshops Act, 1901. In each case the notice was complied with.

BAKEHOUSES.—There are a number of retail bakehouses in your district, all of which have been regularly inspected with the view of enforcing the provisions of the Act, so far as they relate to cleanliness, etc.

SLAUGHTER-HOUSES.—The slaughter-houses in your area have been regularly inspected, and the byelaws made by your Council as far as possible enforced. Four licences have been granted to applicants after an inspection of their premises proposed to be used for slaughtering had been made, and the necessary alterations carried out. A number of carcasses which were examined at the request of the owners by the Medical Officer of Health and myself, and found to be diseased and unfit for human food, were voluntarily destroyed by such owners.

WATER ANALYSIS.—A sample of water taken from a well at Mr. George Cliffe's, Kingswood Green, Newhall, was submitted to the Public Analyst, and was certified as being unfit for domestic and dietetic purposes. The well has been filled up and another sunk through an impervious stratum at a safe distance from all possible sources of contamination; the new well is alleged to yield a good supply of wholesome drinking water.

**INFECTIOUS DISEASES.**—All infectious diseases which have been notified have had prompt attention: disinfectants have been liberally supplied in each case, also printed precautions informing those having charge of the infected person what measures to adopt to prevent the spread of the disease.

Prompt action was taken in the case of smallpox reported from Little Heath, Audlem. The patient was removed to the Smallpox Hospital, and the walls of the rooms in which he had been were sprayed with strong disinfectants several times, and the paper afterwards removed; then a second process of spraying, and the walls and ceiling limewashed; the beds, clothing, books, etc., which had been used by the infected person were destroyed by fire. Several things were removed to Crewe Isolation Hospital for thorough disinfection in the steam apparatus. Through the prompt action taken the disease was successfully stamped out.

**SCAVENGING.**—The scavenging in the villages where the work is done by public contract has (with the exception of Haslington) been satisfactorily done. I have on more than one occasion been compelled to call the attention of the Haslington Contractor to the irregular manner in which his work was being performed, and to insist on his carrying out the terms of the contract entered into with your Council. During the year the Council decided to scavenge a number of houses in the Parish of Church Coppenhall. The work so far has been satisfactorily done.

**ACCUMULATION OF REFUSE.**—Two informal notices have been served upon persons responsible, for abating nuisances occasioned by the accumulation of refuse, manure, etc.

**POLLUTION OF DITCHES.**—Four cases of nuisances arising from the pollution of ditches by sewage have been satisfactorily dealt with.

**STATUTORY NOTICES.**—Thirteen Statutory Notices have been served upon persons responsible for abating nuisances, and in each case they have been complied with. A large number of informal notices directing the attention of owners of property to nuisances have been issued, and a number of personal interviews held, the result of which have been satisfactory.

**HOUSING.**—A speculator in house property requested me to meet him in the Parish of Church Coppenhall, jointly to inspect a number of houses which were in a state of bad repair, and had stood empty for a number of years; whilst making the inspection, the improvements needed to put the property into a sanitary and habitable condition were pointed out. The improvements have been executed, and the houses occupied at the low rental of 2/- per week. Each house contains a living room, two bedrooms, a scullery, and is provided with the usual out-offices.

**RURAL HOUSING.**—The question of the erection of cheaper dwellings in Rural Districts has recently been the subject of debate. I have followed with more than ordinary interest the discussions as they have appeared from time to time in the Sanitary Journals. It appears to be the consensus of opinion that one of the principal obstacles in the way of building cheaper cottages for the housing of rural labourers, is the oppressive and prohibitive character of building byelaws which are adopted by many of the Rural District Councils.

Building byelaws are, in many instances, adopted in Rural Districts which have been framed to meet the requirements of populous *Urban Areas*, and where they have been adopted they have been found to act oppressively. The desideration in Rural Districts is the relaxation of building byelaws to permit the use of cheaper materials in the construction of walls of houses. The byelaws usually demand the exclusive use of brick, or stone, or other incombustible material, which it is obvious greatly adds to the cost of buildings. Such a demand is considered unreasonable. It is now being urged that building operations in purely Rural Districts should be freed from many of the costly and prohibitive requirements now so often enforced.

Other materials than brick or stone, and inexpensive when compared with them, could be used in the erection of labourers' cottages in purely Rural Districts, and no objection could be urged from a sanitary standpoint against them. Despite this fact the byelaws in force in a part of your district—and the same may be said of many other Rural Districts—prohibit the use of the cheaper materials in the building of cottages.

The housing problem bristles with difficulties, but they are not of such a character as to be deemed insurmountable. If by some modifications building operations in purely rural areas were rendered cheaper, landlords would be encouraged to provide accommodation for farm labourers, and one of the causes of the depopulation of Rural Districts would be removed.

JOHN STOREY.

Inspector of Nuisances.

January 25th, 1905.







